DEPARTMENT OF PSYCHOLOGY BERKELEY 4, CALIFORNIA

May 15, 1962

Professor Joshua Lederberg Department of Genetics Stanford University School of Medicine Stanford Medical Center 300 Pasteur Drive Palo Alto, California

Dear Professor Lederberg:

I am pleased that information about our research has reached the other side of San Francisco Bay by way of Tokyo.

Most of the work mentioned in the "Men and Molecules" program has not yet been published. I am sending you, therefore, one published article, three papers in press and a paper that I just presented at the Federation Meetings.

As you will see from these papers, animals raised under more complex conditions, when compared with littermates raised in impoverished environments, develop greater total activity of cholinesterase throughout the brain and also develop a greater weight of cerebral cortical tissue. In some further research that is not yet written up, we have found that per cent protein and hexokinase activity per unit weight do not differ between the complex environment and restricted environment groups of animals. Cholinesterase activity, which does not increase in the cortex as rapidly as does the weight of the cortex, thus acts differently from both protein and hexokinase. We also have in progress histological analyses of the brains of these groups of rats.

If you wish further information about this work, I would be happy to supply it. I would also appreciate any comments or suggestions that you might wish to make.

Sincerely,

Mark R. Rosenzweig

Professor ---

MRR:HL

Enclosures 5

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